

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-3. (Cancelled).

4. (Currently amended) ~~The circuit of claim 2, further comprising:~~ A circuit comprising:

a. an input,

b. an output,

c. a chopper stabilized, multistage feedforward amplifier connected between said input and said output, and

d. an analog to digital converter connected between said amplifier and said output; and

(e) a rough buffer connected between said input and said amplifier.

5. (Original) The circuit of claim 4 in which said rough buffer comprises an amplifier configured to charge rapidly during one time interval and to charge more slowly but more accurately during a second time interval.

6. (Original) The circuit of claim 4, further comprising a plurality of inputs and a multiplexer, connected to said inputs, for selectively applying at least one of said inputs to said rough buffer.

7. (Original) The circuit of claim 6 further comprising a filter connected between the analog to digital converter and said output and a serial port for receiving control information from external to said circuit for use in controlling said circuit.

8. (Original) The circuit of claim 7 in which said filter comprises a sinc^5 filter and a sinc^3 filter.
9. (Original) The circuit of claim 8 further comprising a selection mechanism to selectively route the output of the sinc^5 filter to either the output or to the sinc^3 filter.
10. (Currently amended) ~~The circuit of claim 2;~~ A circuit comprising:
- a. an input,
 - b. an output,
 - c. a chopper stabilized, multistage feedforward amplifier connected between said input and said output, and
 - d. an analog to digital converter connected between said amplifier and said output; in which said analog to digital converter is configured to accept rail to rail input and in which a bypass path, including a buffer for low input current, is selectively enabled to connect said input directly to said analog to digital converter, bypassing said amplifier.

11.- 31. (Cancelled).